

Job Description

Please complete all accessible boxes and refer to the guidance on writing Job Descriptions

Position Details		
Faculty/Professional Support Service	Faculty of Science and Engineering	
School/Department	Engineering	
Division/Section/Unit		
Job Title	(KTP Associate)	
Vacancy No	Recruitment Team	
Grade		
Hours of Work		
Contract Duration (Perm/Fixed Term)	Fixed Term Contract – 2 years	
Reports To (Job Title)	Dr Aris Christos Alexoulis Chrysovergis, Lecturer, Engineering Dr Stephen Goodes, Director of Instrument Development, Micro Materials Ltd	
Responsible For (Job Title)	N/A	

Principal Accountabilities
<p>Delivery of a Knowledge Transfer Partnership (KTP) to embed advanced electronic and software engineering to develop next generation nanomechanical testing equipment.</p> <p>Employed and supported by a team of academic experts from the university, you will be based at Micro Materials Ltd's premises in Wrexham.</p> <p>Ensuring successful stated project outcomes and compliance with MMU, Innovate UK and Micro Materials Ltd's procedures and financial regulations through acting as overall project manager.</p>

Key Tasks

Complete a review of the Micro Materials (MML) business and wider nanomechanical industry to gain a technical and commercial understanding of the project.

Form the Working Group and engage with the MML senior stakeholders and Project Team in developing an intricate understanding of operating and multi-disciplinary interfaces of the NTV instrument.

Investigate a set of selected subsystems to identify and mitigate noise that affects the nanoindentation test results, producing the low noise electronics solution for the NTV2 and NTV2 control unit.

Develop combined mechatronic and software approaches that will optimise the physical operating performance (targeting a ten-fold improvement) of the testing speed and stage control of the instrument.

Lead the Project Team in creating the prototype solutions for the NTV2 instrument and NTV2 Control Unit.

Develop new capabilities within the business to comply with upcoming changes in ISO/IEC 17025 and develop a new capability within the business to undertake horizon scanning assessments.

Support the embedding of the new capabilities by integrating them into MML's current product development procedures so that they become central to their way of operating.

Project finalisation and handover:

- lead an evaluation of the project.
- host a final staff workshop to reinforce knowledge of the new capabilities that have been developed during the project.
- formalise all project documentation and formally hand them over to MML.

Be responsible for project budget according to Innovate UK regulations and forecast spend appropriately.

Be responsible for arranging monthly project team meetings.

Present on progress and future deliverables at quarterly steering group meetings to the university, company and funder.]

Special Features

Willingness to travel both in the UK and abroad in order to aid successful completion of the project.

Miscellaneous

You have a legal duty, so far as is reasonably practical, to ensure that you do not endanger yourself or anyone else by your acts or omissions. In addition, you must cooperate with the University and Micro Materials Ltd on health and safety matters and must not interfere with or misuse anything provided by health, safety and welfare purposes.

You are responsible for applying the University's Equal Opportunities Policy in your own area of responsibility and in your general conduct.

You have a responsibility to promote high levels of customer care within your own area of work.

Such other relevant duties commensurate with the grade of the post as may be assigned by the Manager in agreement with you. Such agreement should not be unreasonably withheld.

Review

This is a description of the job at the time of issue. It is the University's practice periodically to review and update job descriptions to ensure that they accurately reflect the current nature of the job and requirements of the University and to incorporate reasonable changes where required, in consultation with the job holder.

Person Specification

In order to be shortlisted you must demonstrate that you meet all the essential criteria and as many of the desirable criteria as possible. Where we have a large number of applications that meet all of the essential criteria, we will then use the desirable criteria to produce the shortlist.



All disabled candidates who meet the minimum essential criteria will be included on the shortlist.

Selection Criteria					
Attributes		Item	Relevant Criteria	Identification Method	Rank
1	Skills & Abilities	1.1	Good command of written and spoken English.	A/I	E
		1.2	Leadership and ability to engage effectively with senior stakeholders in the business.	A/I	E
		1.3	Excellent interpersonal skills including teamwork, communication, organisational, problem-solving and management skills.	A/I	E
		1.4	Strong time management skills and the ability to self-motivate.	A/I	E
2	General & Specialist Knowledge	2.1	Knowledge of statistical and data analytic techniques, and database systems.	A/I	E
		2.2	Knowledge or experience in the engineering sector, specifically in the areas of mechatronics, nanomechanics, tribology, or surface engineering would be highly beneficial.	A/I	D
3	Education & Training	3.1	MSc in Electronic or Mechatronic Engineering, or a similar discipline.	A/C	E
		3.2	Formal qualification or substantial experience in the field of software engineering, with comprehensive experience in National Instruments software.	A/C/I	E
4	Relevant Experience	4.1	Experience of a wide range of programming languages including NI, ANSI C, Python, PHP, ASP.NET, MySQL and JavaScript.	A/I	E
5	Special Requirements	5.1	You must be willing to travel in the UK and abroad (as required) and to attend training, conferences, etc.	A/I	E

Date of Revision	June 2021		
Key	Identification Method	A	Application Form
		I	Interview
		T	Test
		C	Copy of Certificates
		P	Presentation
		G	Group Assessment
	Rank	E	Essential
		D	Desirable